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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/265,946	03/11/1999	NABIL HUSSEINI	032391-002	5100
21839	7590	10/07/2003	EXAMINER	
BURNS DOANE SWECKER & MATHIS L L P POST OFFICE BOX 1404 ALEXANDRIA, VA 22313-1404			SEMUNEGUS, LULIT	
			ART UNIT	PAPER NUMBER
			3641	

DATE MAILED: 10/07/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/265,946	HUSSEINI ET AL.	
	<b>Examiner</b> Michael J Carone	<b>Art Unit</b> 3641	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on 17 July 2003.

2a) This action is FINAL.      2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 1-20,114 and 116 is/are pending in the application.

4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5) Claim(s) \_\_\_\_\_ is/are allowed.

6) Claim(s) 1-20,114 and 116 is/are rejected.

7) Claim(s) \_\_\_\_\_ is/are objected to.

8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11) The proposed drawing correction filed on \_\_\_\_\_ is: a) approved b) disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.

12) The oath or declaration is objected to by the Examiner.

#### Priority under 35 U.S.C. §§ 119 and 120

13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) The translation of the foreign language provisional application has been received.

15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

#### Attachment(s)

1) <input type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ .
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .	6) <input type="checkbox"/> Other: _____ .

**DETAILED ACTION*****Response to Arguments***

1. Applicant's arguments with respect to claims 1-20 and 114-115 have been considered but are moot in view of the new ground(s) of rejection. Applicant's arguments (paper # 32) is that Ringdal teaches a cartridge with a plastic casing body having a radial partition wall therein and therefore do not disclose a cartridge casing body forming an open tube between the first and the second end. These newly added limitations to claim 1 and a newly added claim 116 are addressed below.

***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-5, 20 and 114-116 are rejected under 35 U.S.C. 103(a) as being unpatentable over Leshner (4,726,296) in view of Ringdal (2,862,446).

In regards to claims 1-2, 20 and 114-116, Leshner teaches a cartridge casing body (15) having a first end and a second end, the cartridge casing body forming an open tube between the first end and the second end; and a projectile attached to the first end of the cartridge casing body, the first end of the cartridge casing body being closed only by the projectile (fig. 5). Leshner does not expressly teach the cartridge casing body is injection molded around at least a portion of the projectile. Ringdal discloses an ammunition article, comprising: an injection molded plastic cartridge casing

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body (3), having a first end and a second end; and a projectile (7) attached to the first end of the cartridge casing body, wherein the cartridge casing body is injection molded around at least a portion of the projectile (col. 2, lines 15-19) and a base (1) where the body (3) includes an interior volume including a first interior portion defined by the portion of the projectile and a second interior portion having a smaller diameter than the first interior portion and being separated from the first interior portion by a shoulder (8), the shoulder being of sufficient size to prevent axial movement of the projectile into the second interior portion (fig. 1-2). At the time of the invention, it would have been obvious to one ordinarily skilled in the art to have the cartridge casing body of Leshner injection molded as taught by Ringdal to make the cartridge casing body easily and effectively by manufacturing the body by one process therefore decreasing cost and time.

In regards to claims 3-5, Ringdal and Leshner disclose all the limitations of claims 3-5 as applied to the claims 1-2, 20 and 114-115 above, except the projectile is attached to the cartridge casing body by heat bond, by adhesive bond or by flange method. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to attach the projectile to the cartridge casing body by heat bond, adhesive bond or by flange instead of molding as described above in Ringdal and Leshner since these methods of attachments are well known in the art.

4. Claims 6-19 are rejected under 35 U.S.C. 103(a) as being unpatentable Ringdal (2,862,446) and Leshner (4,726,296) in view of Boutwell (3,144,827).

As to claims 6-8 and 10-18, Ringdal and Leshner teach all the limitations of claims 6-8 and 10-18 as applied to the claims 1-2, 20 and 114-115 above, except a

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molded plastic base attached to the second end of the cartridge casing body and is attached to the cartridge casing body by various methods of attachment. Boutwell teaches a base (1) which is attached to the casing body by locking mechanism and includes a propellant charge and primer (9). At the time of the invention, it would have been obvious to a person of ordinary skill in the art to use a plastic base and attach this base with casing body using locking groove (3,5) as taught by Boutwell as well as screw threads, ultrasonic weld, interference fit, adhesive and heat bond since these methods of attachments are well known in the art and create a reusable and replaceable base.

As to claims 9 and 19, Ringdal, Leshner and Boutwell teach the claimed invention except for electronic ignition and where the casing body is formed of a combustible material. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to use electronic ignition instead of a primer for igniting the propellant for greater accuracy and consistent ignition and use combustible molded material for better sealing around the projectile.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the

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shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

### ***Conclusion***

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lulit Semunegus whose telephone number is (703) 306-5960. The examiner can normally be reached on Mon-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Carone can be reached on (703) 306-4198. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 305-7687 for regular communications and (703) 305-7687 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1113.

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October 1, 2003

Lulit Semunegus  
Examiner  
Art Unit 3641

MICHAEL A. CARONE  
SUPERVISORY EXAMINER